

Product datasheet

Anti-TSG101 antibody [4A10] ab83

★★★★★ 3 Abreviews 125 References 11 图像

概述

产品名称	Anti-TSG101抗体[4A10]
描述	小鼠单克隆抗体[4A10] to TSG101
宿主	Mouse
特异性	This antibody recognizes the TSG-101 protein, the product of a recently identified tumor susceptibility gene the inactivation of which in mouse fibroblasts results in cell transformation and the ability of those cells to form tumors in nude mice.
经测试应用	适用于: Flow Cyt, ICC/IF, IP, WB, IHC-P
种属反应性	与反应: Mouse, Rat, Human
免疫原	Fusion protein corresponding to Human TSG101 aa 167-374. Expressed in E.coli Database link: Q99816
阳性对照	WB: Neuro-2a, C8D30, NIH/3T3, RAW 264.7, C2C12, HeLa, HepG2, A431, K562 and THP-1 whole cell lysate, mouse testis. ICC/IF: Amyloid peptide-treated mouse astrocytes IHC-P: human ovarian cancer tissue, human breast carcinoma tissue.
常规说明	This product was changed from ascites to tissue culture supernatant on 12th February 2018. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	pH: 7.40 Constituent: PBS w/o preservative
纯度	Protein G purified
纯化说明	Purified from tissue culture supernatant by Protein G chromatography to at least 95% homogeneity as determined by SDS-PAGE.
克隆	单克隆
克隆编号	4A10

骨髓瘤	NS1
同种型	IgG1
轻链类型	kappa

应用

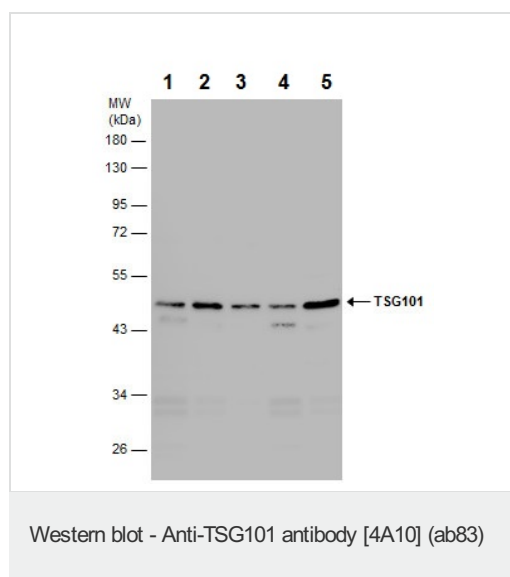
Our [Abpromise guarantee](#) covers the use of **ab83** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
Flow Cyt		Use at an assay dependent concentration. PubMed: 23045692 ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		1/500 - 1/1000.
IP		Use at an assay dependent concentration.
WB	★★★★☆	1/500 - 1/3000. Detects a band of approximately 47 kDa (predicted molecular weight: 43 kDa).
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

靶标

功能	Component of the ESCRT-I complex, a regulator of vesicular trafficking process. Binds to ubiquitinated cargo proteins and is required for the sorting of endocytic ubiquitinated cargos into multivesicular bodies (MVBs). Mediates the association between the ESCRT-0 and ESCRT-I complex. Required for completion of cytokinesis; the function requires CEP55. May be involved in cell growth and differentiation. Acts as a negative growth regulator. Involved in the budding of many viruses through an interaction with viral proteins that contain a late-budding motif P-[ST]-A-P. This interaction is essential for viral particle budding of numerous retroviruses.
组织特异性	Heart, brain, placenta, lung, liver, skeletal, kidney and pancreas.
序列相似性	Belongs to the ubiquitin-conjugating enzyme family. UEV subfamily. Contains 1 SB (steadiness box) domain. Contains 1 UEV (ubiquitin E2 variant) domain.
结构域	The UEV domain is required for the interaction of the complex with ubiquitin. It also mediates the interaction with PTAP/PSAP motifs of HIV-1 P6 protein and human spumaretrovirus Gag protein. The coiled coil domain may interact with stathmin. The UEV domain binds ubiquitin and P-[ST]-A-P peptide motif independently.
翻译后修饰	Monoubiquitinated at multiple sites by LRSAM1 and by MGRN1. Ubiquitination inactivates it, possibly by regulating its shuttling between an active membrane-bound protein and an inactive soluble form. Ubiquitination by MGRN1 requires the presence of UBE2D1.
细胞定位	Cytoplasm. Membrane. Nucleus. Late endosome membrane. Mainly cytoplasmic. Membrane-associated when active and soluble when inactive. Depending on the stage of the cell cycle, detected in the nucleus. Colocalized with CEP55 in the midbody during cytokinesis.



All lanes : Anti-TSG101 antibody [4A10] (ab83) at 1/500 dilution

Lane 1 : Neuro-2a (Mouse neuroblastoma cell line) whole cell lysate

Lane 2 : C8D30 whole cell lysate

Lane 3 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

Lane 4 : RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 5 : C2C12 (mouse myoblast cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-mouse IgG antibody at 1/500 dilution

Predicted band size: 43 kDa

10% SDS PAGE

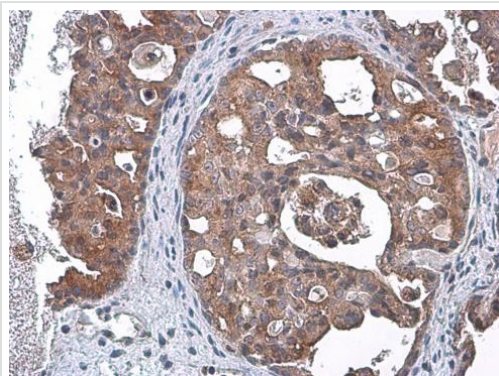
Running conditions: 80V for 15min then 140V for 40min

Blocking: 5% non-fat milk in TBST at room temperature for 60min.

Washing conditions: 5 ml TBST, 4 x 5min

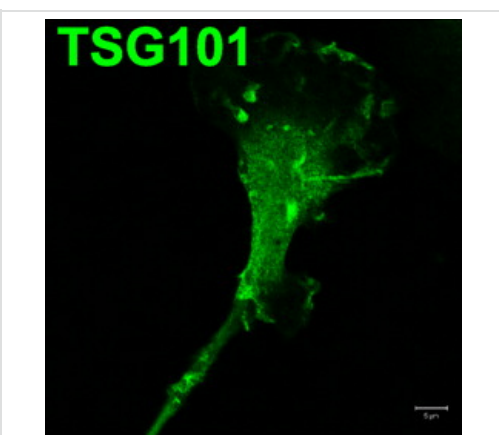
Transfer conditions: Semi-dry, 18 V, 60min (NC membrane)

Exposure system: Trident plus Western HRP Substrate



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TSG101 antibody [4A10] (ab83)

Immunohistochemical analysis of paraffin-embedded human ovarian cancer tissue labeling TSG101 with ab83 at 1/100 dilution. Cytoplasmic staining is observed. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min. (Cuisinart Electric Pressure Cooker #EPC-1200, choose "high pressure"). Endogenous peroxidase blocking: 3% H₂O₂, RT, 30min. Blocking condition: 1.5% goat serum (dilute goat serum by 1xPBS), RT, 30min. Primary antibody incubation: 4°C overnight. Secondary antibody incubation: HRP Kit (Mouse IgG), 1:200, RT, 30min. Washing: PBS, 2 x 5 minutes. DAB detection.

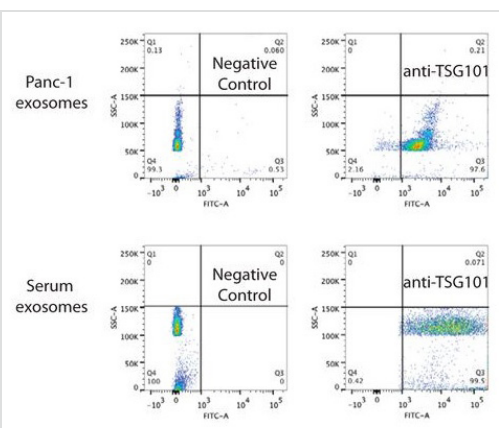


Immunocytochemistry/ Immunofluorescence - Anti-TSG101 antibody [4A10] (ab83)

Immunofluorescence analysis of amyloid peptide-treated mouse astrocytes, staining TSG101 with ab83.

Astrocytes were fixed with paraformaldehyde and permeabilized with 0.2% Triton X-100 for 5 min at room temperature. Cells were incubated with primary antibody and a fluorescent-conjugated anti-mouse IgG was used as the secondary antibody.

Image from Wang G et al., J Biol Chem. 2012 Jun 15;287(25):21384-95. Epub 2012 Apr 24. Fig 7.; doi: 10.1074/jbc.M112.340513; June 15, 2012, The Journal of Biological Chemistry, 287, 21384-21395.

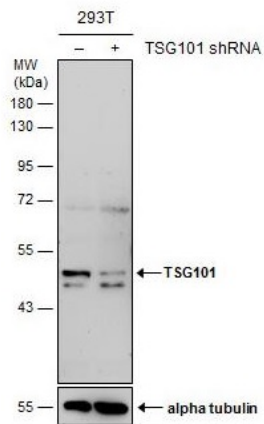


Flow Cytometry - Anti-TSG101 antibody [4A10] (ab83)

Panc-1 and Serum Exosomes were characterized by the exosome-specific expression of TSG101 by FACS analysis.

Exosomes were attached to 4- μ m aldehyde/sulfate latex beads by mixing ~30 μ g of exosomes in a 100- μ l volume of beads for 2 hours at room temperature. This suspension was diluted to 1 ml with PBS, and the reaction was stopped with 100 mM glycine and 2% BSA in PBS. Exosome-bound beads were washed in PBS/1% BSA, blocked with 10% BSA, and stained for FACS with anti-TSG101 (1:400, ab83). An Alexa Fluor® 488 conjugated anti-mouse IgG was used as the secondary antibody.

Image from Kahlert C et al., J Biol Chem. 2014;289(7):3869-75. Fig 1(C).; doi: 10.1074/jbc.C113.532267.



Western blot - Anti-TSG101 antibody [4A10] (ab83)

All lanes : Anti-TSG101 antibody [4A10] (ab83) at 1/500 dilution

Lane 1 : Non-transfected (-) 293T whole cell extracts

Lane 2 : TSG101 shRNA transfected (+) 293T whole cell extracts

Lysates/proteins at 30 µg per lane.

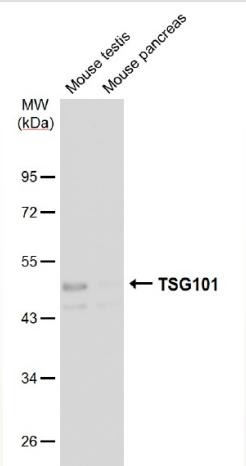
Secondary

All lanes : HRP-conjugated anti-mouse IgG antibody

Developed using the ECL technique.

Predicted band size: 43 kDa

10% SDS-PAGE



Western blot - Anti-TSG101 antibody [4A10] (ab83)

All lanes : Anti-TSG101 antibody [4A10] (ab83) at 1/500 dilution

Lane 1 : Mouse testis tissue extract

Lane 2 : Mouse pancreas tissue extract

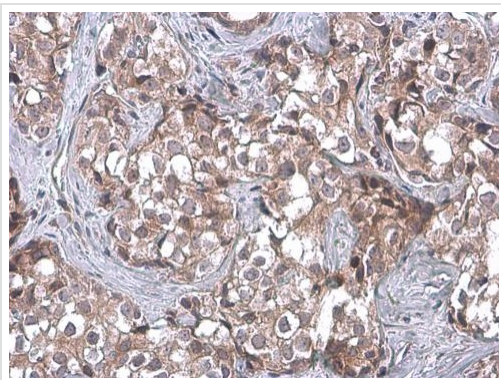
Lysates/proteins at 50 µg per lane.

Secondary

All lanes : HRP-conjugated anti-mouse IgG antibody

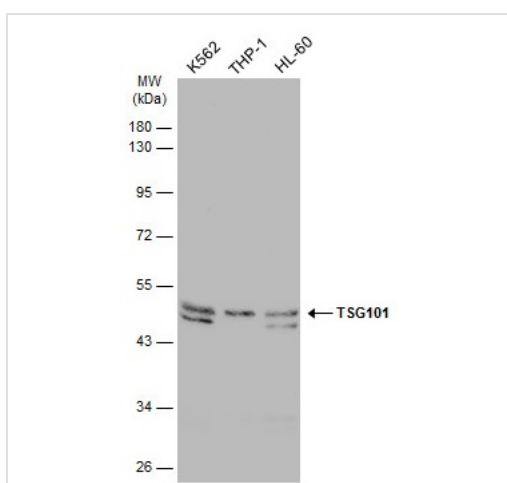
Developed using the ECL technique.

Predicted band size: 43 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TSG101 antibody [4A10] (ab83)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labeling TSG101 with ab83 at 1/100 dilution. Cytoplasmic staining is observed. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



Western blot - Anti-TSG101 antibody [4A10] (ab83)

All lanes : Anti-TSG101 antibody [4A10] (ab83) at 1/500 dilution

Lane 1 : K562 whole cell extract

Lane 2 : THP-1 whole cell extract

Lane 3 : HL-40 whole cell extract

Lysates/proteins at 30 µg per lane.

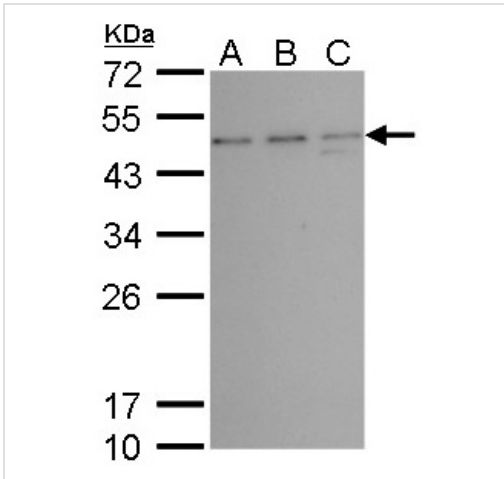
Secondary

All lanes : HRP-conjugated anti-mouse IgG antibody

Developed using the ECL technique.

Predicted band size: 43 kDa

10% SDS-PAGE



Western blot - Anti-TSG101 antibody [4A10] (ab83)

All lanes : Anti-TSG101 antibody [4A10] (ab83) at 1/500 dilution

Lane 1 : NIH-3T3 whole cell lysate/extract

Lane 2 : JC (mouse mammary adenocarcinoma) whole cell lysate/extract

Lane 3 : BCL-1 whole cell lysate/extract

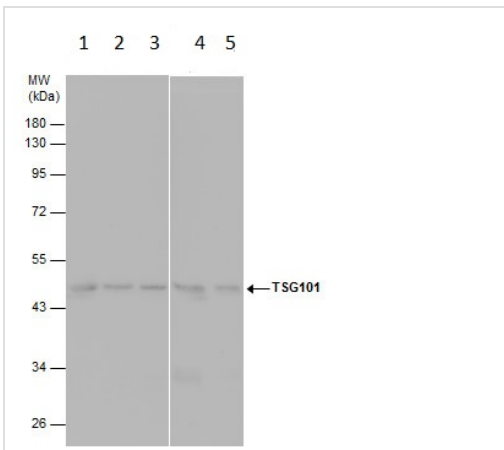
Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-mouse IgG antibody

Predicted band size: 43 kDa

10% SDS-PAGE



Western blot - Anti-TSG101 antibody [4A10] (ab83)

All lanes : Anti-TSG101 antibody [4A10] (ab83) at 1/500 dilution

Lane 1 : A431 whole cell lysate

Lane 2 : HeLa whole cell lysate

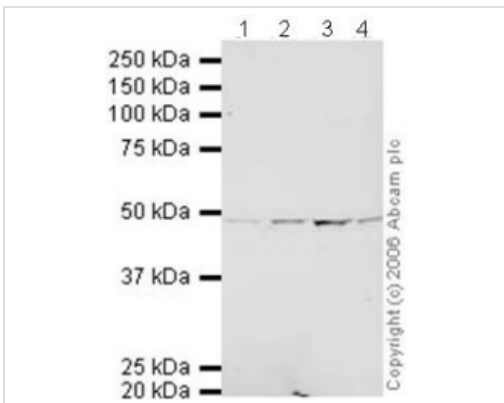
Lane 3 : HepG2 whole cell lysate

Lane 4 : K562 whole cell lysate

Lane 5 : THP-1 whole cell lysate

Lysates/proteins at 30 µg per lane.

Predicted band size: 43 kDa



Western blot - Anti-TSG101 antibody [4A10] (ab83)

All lanes : Anti-TSG101 antibody [4A10] (ab83) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : A431 whole cell lysate ([ab7909](#))

Lane 3 : Jurkat whole cell lysate ([ab7899](#))

Lane 4 : HEK293 whole cell lysate ([ab7902](#))

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Donkey polyclonal to Mouse IgG (IRDye™ 700DX) at 1/10000 dilution

Predicted band size: 43 kDa

Observed band size: 49 kDa

[why is the actual band size different from the predicted?](#)

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